1. - 8. (Canceled)

9. (Previously presented) A method for optimizing the display of Doppler ultrasound information comprising:

receiving Doppler signal information, including at least some Doppler signal information which is not used to produce a displayed Doppler image;

processing Doppler signal information for display of a Doppler image in a display area; and

analyzing Doppler signal information which is not used to produce a displayed Doppler image to optimize at least one of the display parameters of the PRF, the color baseline, the color range polarity, or the range of color pixel values for display of the processed Doppler signal information in the display area.

10. (Previously presented) The method of Claim 9, wherein processing further comprises processing Doppler signal information for display of a colorflow Doppler image in the display area.

11. (Previously presented) The method of Claim 9, wherein processing further comprises processing Doppler signal information for display of a velocity Doppler image in the display area.

12. (Previously presented) The method of Claim 9, wherein processing further comprises processing Doppler signal information for display of a Doppler M-mode image in the display area.

13. (Previously presented) The method of Claim 9, wherein processing further comprises processing Doppler signal information for display of a power Doppler image in the display area.

14.   (Original) The method of Claim 9, wherein the optimized display parameters map the processed Doppler signal information to make more extensive use of the range of color or intensity of displayed Doppler information.

15.   (Previously presented) The method of Claim 9,wherein analyzing Doppler signal information to produce optimized display parameters occurs substantially continuously during display of the Doppler image being optimized.

16.   (Original) The method of Claim 9, fur ther comprising updating the display parameters periodically after a predetermined number of heart cycles.

17.   (Original) The method of Claim 9,wherein analyzing Doppler signal information to produce optimized display parameters occurs in response to mo dification of a Doppler setting by the user.

18.   (Canceled)

19.   (Previously presented) The method of Claim 9,further comprising:
    storing a sequence of processed Doppler images in memory; and
    wherein analyzing further comprises analyzing Doppler signal information to produce optimized display parameters for display of the stored Doppler images.

20. - 22. (Canceled)

23.   (Previously presented) The method of Claim 9, wherein processing further comprises processing Doppler

signal information for display of a spectral Doppler image
in the display area.

24. - 33. (Canceled)